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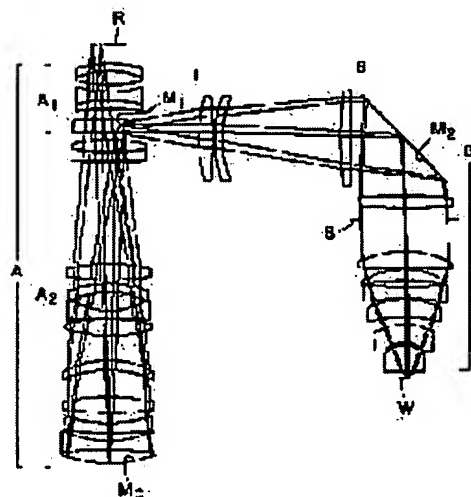
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(54) CATA-DIOPTRIC SYSTEM



(57)Abstract:

PROBLEM TO BE SOLVED: To restrain eccentricity aberration caused by eccentricity to be small and to reduce reflectance irregularity caused by the 2nd mirror of a 2nd image-formation optical system by arranging the 2nd mirror near an aperture diaphragm, and satisfying a specified condition.

SOLUTION: This system is provided with a 1st image-formation optical system A forming the intermediate image of a pattern drawn on a reticle R, a 1st mirror M1 in the vicinity of the intermediate image, and the 2nd image-formation optical system B forming the reformed image of the intermediate image on a wafer W. A concave mirror Mc is arranged in the reciprocating optical system A2 of the optical system A so that luminous flux from a going-path optical system A1 may be reflected. The luminous flux passing the optical system A2 on a returning-path is guided to the optical system B by the 1st mirror M1. The aperture diaphragm S is arranged in the optical system B, and the 2nd mirror M2 is arranged on this side of the diaphragm S. Then, the system satisfies either of expressions $L1/L < 0.1$ and $L1/L2 < 0.2$. Provided that L1 is a distance from the mirror M2 to the diaphragm S, L is the distance of an optical path leading to the wafer W from the

reticle R and L2 is the distance of the optical path leading to the wafer W from the 1st mirror M1.

LEGAL STATUS

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